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| APPLICATION NO.                   | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------|-------------|-----------------------|---------------------|------------------|
| 10/774,216                        | 02/06/2004  | Michael L. McClelland | EMER 2630           | 8119             |
| 28997                             | 7590        | 05/27/2005            | EXAMINER            |                  |
| HARNESSE, DICKEY, & PIERCE, P.L.C |             |                       | NGUYEN, HANH N      |                  |
| 7700 BONHOMME, STE 400            |             |                       | ART UNIT            |                  |
| ST. LOUIS, MO 63105               |             |                       | PAPER NUMBER        |                  |

2834

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/774,216

Applicant(s)

MCCLELLAND ET AL

Examiner

Nguyen N. Hanh

Art Unit

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al.

Regarding claim 11, Tanaka et al. also disclose a dynamoelectric machine comprising: a stator core (10) having a longitudinal axis and a length along said axis; wire windings (11) on said stator core; and a rotor (5) mounted for rotation relative to the stator core about said axis to interact magnetically with the stator core and windings; and two endshields (6d and 7d in Fig. 3) defining opposite ends of the machine, at least one of the endshields having a portion which extends to a longitudinal position within the stator core.

2. Claims 1-7, 10-13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Honda et al.

Regarding claim 1, Honda et al. disclose a dynamoelectric machine comprising: a stator core (2 in Fig. 1) having a longitudinal axis and a length along said axis; wire windings (5) on said stator core; a rotor shaft (7); a rotor (3) positioned within the stator core mounted for rotation relative to the stator core about said axis to interact magnetically with the stator core and windings, the rotor having a length along said axis;

and at least a first bearing (9) supporting the rotor shaft for rotation, said first bearing being positioned longitudinally within the stator core (Fig. 1).

Regarding claim 11, Honda et al. also disclose a dynamoelectric machine comprising: a stator core (2) having a longitudinal axis and a length along said axis; wire windings (5) on said stator core; and a rotor (3) mounted for rotation relative to the stator core about said axis to interact magnetically with the stator core and windings; and two endshields (10 and 11) defining opposite ends of the machine, at least one of the endshields (11) having a portion which extends to a longitudinal position within the stator core.

Regarding claim 2, Honda et al. also disclose a dynamoelectric machine wherein said length of the rotor is less than said length of the stator (Fig. 1).

Regarding claim 3, Honda et al. also disclose a dynamoelectric machine wherein the rotor is longitudinally centered in the stator core.

Regarding claim 4, Honda et al. also disclose a dynamoelectric machine further comprising a second bearing (8) supporting the rotor shaft for rotation.

Regarding claims 5 and 13, Honda et al. also disclose a dynamoelectric machine wherein the rotor includes a recess (21) for receiving said first bearing (9).

Regarding claim 6, Honda et al. also disclose a dynamoelectric machine further comprising two endshields (10 and 11 in Fig. 1) defining opposite ends of the machine, at least one of the endshields (11) having a portion which extends to a longitudinal position within the stator core.

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Regarding claim 7 Honda et al. also disclose a dynamoelectric machine wherein at least one endshield (11) comprises a housing (11a) for mounting electronic component of the machine (resolver 23a and 23b).

Regarding claims 10 and 15, Honda et al. also disclose a dynamoelectric machine wherein said machine is a switched reluctance type machine (inherent because this machine does not require brushes or slip rings).

Regarding claim 12 Honda et al. also disclose a dynamoelectric machine further comprising a rotor shaft (7) and two bearings (8 and 9) supporting the rotor shaft for rotation and wherein the rotor and at least one of the bearings (9) is positioned longitudinally within the stator core.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. in view of Matsushita et al.

Regarding claim 7, Honda et al. show all limitations of the claimed invention except showing a dynamoelectric machine wherein at least one said endshield has a cavity for holding one or more capacitors.

However, Matsushita et al. disclose a motor structure wherein at least one said endshield has a cavity for holding one or more capacitors (15 in Fig. 3A and 3B) for the purpose of driving the electrical equipment (Col. 1, lines 5-12).

Since Honda et al. and Matsushita et al. are in the same field of endeavor, the purpose disclosed by Matsushita et al. would have been recognized in the pertinent art of Honda et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Honda et al. by using endshield as a housing for mounting electronic components as taught by Matsushita et al. for the purpose of driving the electrical equipment.

4. Claims 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda et al. in view of Adams.

Regarding claims 9 and 14, Honda et al. show all limitations of the claimed invention except showing a dynamoelectric machine further comprising a cooling jacket for removing heat from the machine, the cooling jacket being in heat transfer communication with the stator core along the entire said length of the stator core.

However, Adams discloses a motor structure further comprising a cooling jacket (212 in Fig. 1) for removing heat from the machine, the cooling jacket being in heat transfer communication with the stator core along the entire said length of the stator core for the purpose of improving the machine cooling.

Since Honda et al. and Adams are in the same field of endeavor, the purpose disclosed by Adams would have been recognized in the pertinent art of Tanaka et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Honda et al. by using a cooling jacket for removing heat from the machine, the cooling jacket being in heat transfer communication with the stator core along the entire said length of the stator core as taught by Adams for the purpose of improving the machine cooling.

### ***Response to Arguments***

5. Applicant's arguments filed 3/18/05 have been fully considered but they are not persuasive. The applicant's argument is on the ground that "the reference that the Examiner relies on, Tanaka et al. fail to show the end shield that extends to a longitudinal position within the stator core because bush 13 is not an end shield". The Examiner respectfully disagrees with the Applicant. Fig. 3 clearly show bush 13 extends to a longitudinal position within the stator core and bush 13 is a portion of end shield assembly 7 (which used to cover one end of the motor housing). For the reason explained above, the rejection under Tanaka et al. is still deemed proper.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Information on How to Contact USPTO***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (571) 272-2031. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg, can be reached on (571) 272-2044. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HNN

May 19, 2005

  
**DARREN SCHUBERG**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800